

ISOLATION OF FIVE NOVEL GENES CODING FOR NEW Fc RECEPTORS-  
TYPE MELANOMA INVOLVED IN THE PATHOGENESIS OF  
LYMPHOMA/MELANOMA

5 Abstract of the Disclosure

10 This invention provides an isolated nucleic acid molecule  
which encodes immunoglobulin receptor, Immunoglobulin  
superfamily Receptor Translocation Associated, IRTA,  
protein. Provided too, are the IRTA proteins encoded by  
the isolated nucleic acid molecules, IRTA1, IRTA2, IRTA3,  
15 IRTA4 or IRTA5 proteins, having the amino acid sequences  
set forth in any of Figures 18A, 18B-1-18B-3, 18C-1-18C-2,  
18D-1-18D-2 or 18E-1-18E-2. Oligonucleotides of the  
isolated nucleic acid molecules are provided. Antibodies  
directed to an epitope of a purified IRTA1, IRTA2, IRTA3,  
20 IRTA4 or IRTA5 proteins are also provided, as are  
pharmaceutical compositions comprising such antibodies or  
oligonucleotides. Methods for detecting a B cell  
malignancy in a sample from a subject; diagnosing B cell  
malignancy in a sample from a subject; detecting human  
IRTA protein in a sample; and treating a subject having a B  
cell cancer are also provided.